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Through the Barren Lands:

An Exploration Line of 3,200 Miles.

BY

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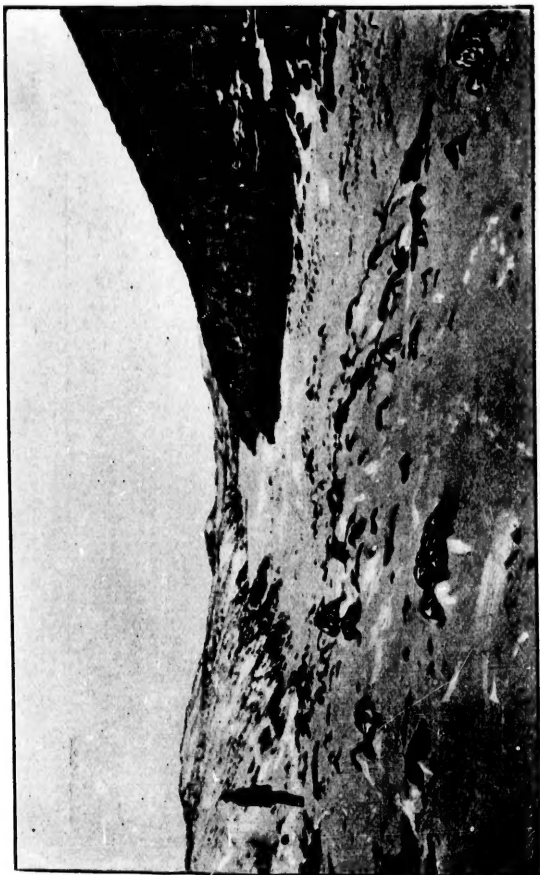
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J. W. TYRRELL, O.L.S. C.E.



A VALLEY IN THE BARRENS.

THROUGH THE BARREN LANDS :

AN EXPLORATION LINE OF 3,200 MILES.

By J. W. TYRRELL,

C.E., D.L.S., Hamilton.

PART I.

(2,200 MILES BY CANOE.)

DURING the early spring of 1893, the Director of the Geological Survey of Canada having issued instructions to my brother, J. Burr Tyrrell, Field Geologist of that department, to conduct an exploratory survey into the great Barren Land district lying to the west of the northern portion of Hudson Bay, preparations were at once commenced for the undertaking.

For the purpose of taking charge of the topographical work and acting as Eskimo interpreter, the services of the writer were engaged.

Two 18-foot varnished cedar canoes were ordered from the Peterboro' Canoe Co., to be shipped to Edmonton.

Four expert canoeemen were employed to handle them, and arrangements were made to have a third 19-foot basswood canoe—used during the previous summer—and two men, in waiting at Fort McMurray on the Athabasca River.

Attention was then turned to the procuring of a suitable set of instruments, and after some difficulty we succeeded in obtaining what, I consider, approaches very nearly an ideal outfit for exploratory work. The following is the complete list :—One large sextant with folding mercurial horizon, one Gurley pocket solar compass with extension leg tripod, two prismatic compasses, one fluid or boat's compass, two pocket compasses, two boat logs, one pedometer, two clinometers, one dipping needle, one pocket chronometer, three American watches, one aneroid barometer, a set of thermometers, a pair of field glasses, an aluminium binocular telescope, and a 4" x 5" hand camera.

Besides the above we provided ourselves with two repeating rifles, one Winchester repeating shot gun, and a good supply of ammunition.

All instruments and arms were well packed for carrying in leather sling cases.

The next matter of importance was the preparation of bills of *supplies* and *provisions*. As much portage work was to be expected on our trip, and as all available carrying capacity would be required for "grub," it appeared to be very necessary that the bulk and

weight of outfit should be kept down as much as possible. Another feature in connection with our survey was that much of our route would lie within the Barren Lands, where no fuel could be obtained for cooking purposes. Endeavoring to provide for these special features, without going too much into detail, the following was our list of *supplies* :—Three cotton "A" tents with tarpaulin floor cloths, one "reflector" or Dutch oven, two thin steel frying pans with folding handles, one nest of kettles, the usual culinary camp outfit of dishes, all made of tin on account of their lightness, three Hudson Bay Co. axes and files to sharpen them, two small gill nets, an assortment of fishing tackle, three tracking lines, eight pack straps, three canoe covers, one dozen large waterproof sacks, five gallons of methylated alcohol, two so-called alcohol stoves, two boxes of candles, matches, one dozen bottles of Jamaica ginger, one dozen bottles of pain killer, and three caddies of tobacco, for use chiefly in securing the goodwill of natives.

Besides the above, the following *provisions* were ordered :—Flour, rice, oatmeal, biscuits, bacon, canned meats, sugar, evaporated fruits, baking powder, tea, chocolate, butter, salt, pepper, and mustard.

With the expectation of securing game on our journey, the quantities of flour and other vegetable foods were made large in proportion to amount of bacon and canned meats.

The orders for these goods, excepting such articles as could not be obtained in the west, were sent on to the Hudson Bay Company's store at Edmonton, where by arrangement, our party—with the exception of the two Fort McMurray half-breeds—assembled on the 22nd of May.

From Edmonton, the north-western terminus of the Canadian Pacific Railway, for a distance of one hundred miles northerly to Athabasca Landing, our outfit was transported by waggons.

Here the bulk of our "stuff" was shipped by the Hudson Bay Company's steamer to Fort Chippewayan on Lake Athabasca, and on the last day of May, with our light and beautiful little crafts, we commenced our canoe journey.

The *survey*, however, was not begun here; and as the Athabasca River, from the landing down to the lake, has been so well described already by our friend Wm. Ogilvie, D.L.S., in his most interesting articles, I will not now attempt to re-describe it.

It will be sufficient to say that after passing down the Grand Rapids in safety and reaching Fort McMurray, we were joined by our third canoe and two additional men. Continuing, we arrived at Fort Chippeweyan, about 350 miles below the Landing, on the evening of the 17th of June.

Two days later the Hudson Bay Company's steamer "*Grahamme*" arrived with our supplies, and now preparations were made for the commencement of our survey.

Henceforth our route was to deviate from the beaten track of traders and former explorers.

The geographical position of Chippeweyan having been determined, it was to be made our starting point, and from here we would have to carry our whole season's supplies. During our brief stay at the Fort, the opportunity for rating the chronometer was taken advantage of; and what we considered a stroke of good fortune was that, through the kind efforts of Dr. McKay, the Company's agent in charge of the post, we secured the services of a native Chippeweyan Indian, named Moberly, who claimed to know the country for a hundred miles or more to the north-east of Lake Athabasca, into which we were proposing to travel. The assistance of such a man to act as our guide could not fail to be of great value to our party. He would be able to save us much time through knowing the trails, by taking us straight to the portages and in finding the best camping places. Of course, Indian-like, he had to be advanced a month's wages in goods from the store. Then he required an assistant to accompany him in his canoe, and finally he wanted an increase in wages. In consideration of the advantages which we hoped to derive from him as an escort, these matters were finally arranged to his liking; and on the morning of the 20th of June, with our little fleet of four canoes all well loaded, and a good-bye to civilization and all its formalities, we hoisted our sails—having a fair breeze—and set out on the traverse of the north shore of the lake.

Distances were measured with the "log," and when landings were made, courses were taken with the prismatic compass, though occasionally they were taken with the fluid compass without going ashore. As frequently as possible, without entailing too much delay, the solar instrument was set up, the magnetic variation determined, and rounds of angles taken. Thus a continual check was kept upon the magnetic compass readings.

Latitude observations were taken every day when the sun could be seen at noon, or the stars at night; and from time to time, at initial points on our route, observations were taken for longitude. When portages were met with, measurements were made by pacing, and on river work the distances were estimated by the time occupied in making them. As our general course on all river work was nearly north, the proper correction for each day's work was known from the determinations of our latitude, and with a little practice very close approximations, even on the streams, were found to be obtainable.

Thus, briefly stated, is the outline of the system of survey adopted by us.

On the 29th instant we reached Fond-du-lac, a winter outpost of the Hudson Bay Company. It was now deserted by all but an Indian family, who appeared to be in a very destitute condition.

From here to the eastward, a distance of fifty miles farther, the lake is quite narrow, having much the appearance of a broad river.

It is only from one to five miles in width, and across on the south shore could be seen a large group of Indian tepees. Here, it was found, was the home of our guide, and to it, of course, we all had to go. Our own canoes were not landed, but Moberly went ashore and

deliberately hauled out and overturned his. For some time we patiently awaited his return, but as he came not, a message was sent to him to make haste as we had no time to spare. After a while he did make his appearance, but only to inform us that he thought he would not go any farther. What could we do? We could not force him to come against his will, and it would do us no good to shoot him—though I confess I felt a little like doing so. We tried to persuade him to come with us, but the best we could do, after supplying his family with tea and sugar, was to get his promise that he would follow and overtake us on the morrow. We did not believe him, but being unable to do any better, we left him sitting on the shore smoking his pipe, and continued our course.

At noon the next day, as we were taking our lunch, sure enough, Moberly and his companion made their appearance. We had not expected them, but were glad that they had disappointed us. From this time forward, the guide, who had usually kept himself in the rear since leaving Chippeweyan, began to lag far behind and only show up at camp or meal time. This sort of thing, he was given to understand, would have to cease. He knew his duties quite well, and was reminded that he was expected to perform them. After this, for half a day, he did better, but then, at the eastern extremity of the lake, finding some of his native friends encamped by the shore, he hauled out his canoe and joined them. Nor could he be induced to continue a foot farther, unless we were prepared to divide up our flour and bacon with his friends, and this we naturally declined to do. From the first, Moberly had proved himself to be a miserable, unreliable scoundrel, and now he and his companion, after doing all they could for ten days to reduce our provisions and securing a month's pay in advance, had resolved to desert us.

Not only this, but, as we afterwards found, he had endeavored to work further mischief by stuffing our men with all sorts of stories about the unsurmountable obstacles along the route we were proposing to take, and about the savage Eskimos who would certainly eat us. Indeed, such an impression did he make on the minds of some of our men, that one came to us and made a clear breast of his troubles. He told us of the report he had heard of the country, and of our certain doom in case we should continue. He said that he had a wife and family at home, and that he did not want to leave them without any one to provide for them, etc., etc., and this we found had become about the general feeling of the party. In reply to this manly confession of fears, I assured the men that old Moberly's yarns were a pack of lies pure and simple, and to prove my assertion I informed them that I had myself lived with the Eskimos for nearly two years, and had found them to be far better people than such as the man who had told them the stories.

By the use of such arguments as these, confidence was again restored, and the miserable, lying, skulking, intriguing Chippeweyan guide—no doubt feeling that he had acted very cleverly—was left with his friends, and we continued our journey, now up the Stone River, the eastern feeder of the lake.

Sunday, the 2nd of July, found us in camp on the bank of this river, at the foot of the lower fall—a wild and beautiful cataract. The weather was very warm and the black flies and mosquitoes swarmed in the woods and about camp, nor did they appear to have the customary aversion to a smudge, for dense smokes were made, and the flies only appeared to revel in them.

Some photographs were obtained of the flies and the falls, whilst during the morning at the foot of the rapids our fishery department secured a number of magnificent white fish and trout, two of which latter measured 3 ft. 2 in. and 3 ft. 1 in. in length respectively.

Our camp was not only situated at the foot of a beautiful waterfall, but in consequence was at the lower end of a rough and rocky portage, which was found to be three miles in length.

We had, at this early stage of our journey, in the neighborhood of four thousand pounds of cargo to be transported, and unfortunately one of our men, Jim, was laid up with a gash in his leg; but on Monday morning, being fresh and in high spirits, the men went at their work with a rush, notwithstanding a 200 feet rocky hill which had to be climbed and a deep muskeg which had to be waded through. Before night, spirits were away down, and every man's feet in the party, excepting those of Jim, who had already a game leg, were fearfully blistered.

Each packer had carried six loads to the opposite end of the portage, representing a walk of thirty-three miles, eighteen of which were travelled under heavy loads.

Camp was pitched with some satisfaction at the upper end of the portage. Two more loads for the party, however, remained at the foot of the rapids. On the following morning these were carried by our limping, back-aching packers to camp, and thence our traverse of the river was resumed.

Early on the afternoon of the same day we reached the upper fall of the Stone River, and found ourselves at the foot of a second long portage. On account of the condition of the men, camp was now ordered to be pitched so as to give them a chance to rest, but my brother and I walked across the portage, which we found to be three and one-half miles in length. Its upper end terminated upon the shore of Black Lake, where it was thought we might see some native Indians who could be hired to assist us across the portage; but in this we were disappointed, finding, instead of Indians, only old forsaken tepee poles and blackened fireplaces.

The weather being extremely warm, and ourselves very weary, we tried to rest for a while upon the shore of the lake, but the flies swarmed about us with such frightful fury that we were obliged to beat a retreat and seek rest where alone it could be found, viz, beneath our mosquito nets at camp.

By the way, there is a Chippeweyan tradition which credits the Great Spirit with having first made black flies upon this very portage. (I have not the slightest doubt as to the truth of the legend.)

About two days were occupied in portaging our outfit to the shore of Black Lake; then on the 7th instant, starting out in a north-

easterly direction and traversing the coast for a distance of sixteen miles, we reached the landing place of an Indian hunting trail, of which my brother had previously been informed by the natives. This place, up to the present time, had been our objective point, and our way to it was known to us; but beyond, nothing was known of our road or of the country through which it would lead us, excepting for a few days' journey, regarding which portion we had the following Indian directions:—"From Black Lake make a long portage northward to a little lake. Then cross five or six small lakes and as many portages, when a large body of water called Wolverine Lake will be reached. Pass through this lake and ascend a river flowing into it from the northward, until a second large lake called 'Active Man' is reached. This lake will take two days to cross, and at its northern end will be found the height of land. Across this there is a portage to another large lake, from the north end of which a Great River flows to the northward through a treeless country unknown to the Indians, but inhabited by savage Eskimos."

As to where this river flowed to we did not know, but were resolved upon making the discovery.

On the morning of July 8th, therefore, without guide or map, we commenced our survey into the great unexplored wilderness. Our road started with a two-mile portage, through thickets, swamps, and over rocky hills. Then in turn, day after day, numerous lakes, streams, and portages—very much as described by our Indian informer—were discovered and traversed.

After getting into a lake on several occasions, much trouble was experienced in finding the portage from it; but altogether less time was occupied in trail hunting than might have been expected. Timber, chiefly black spruce and tamarack, becoming more stunted and thinly scattered as we proceeded northward, extended to the height of land and some distance beyond.

One evening, after a long and miserable day's work up stream, in a cold, chilling rain, one of those little incidents occurred which serve to vary the daily routine of life upon a surveying party. As I was standing by the camp fire trying to dry my clothes and enjoying a cup of hot tea, my brother appeared from over a ridge at the back of the camp—where he and his geological hammer had been at war with the rocks—and announced that he had just heard a cariboo calf not far back in the swamp at the foot of the ridge. Being always ready for sport, I picked up my "Marlin," and, getting him to point out the direction from which he had heard the sound, started out, though already nearly dark, for some venison. The dense spruce swamp was found to be very wet, and literally alive with mosquitoes, which at every step rose up from the wet grass in swarms, and beat into my face. A "run-away" was soon found, and then, thinking that I was likely on the right track, I hurried noiselessly along, hoping soon to hear something of the calf. After travelling some distance without any signs of success, I was about to return for fear of losing my way in the darkness, when, a little distance ahead, I heard the cracking of a stick. Feeling that it was assuredly caused

by the foot of the fawn, with eyes and ears alert I glided silently on. Again and again the noise was heard, and each time nearer than the last; so my advance was continued cautiously until soon in a thicket of scrub, only a few yards ahead, the disturbing of some branches was noticed. Still no deer could be seen; but in creeping up closer, at the distance of only a few yards, I suddenly came within full view of an immense black bear. Although taken by surprise at the proportions of my supposed calf, I levelled for the back of bruin's head, and fired. Several delirious tumbles, followed by a bolt into the gloom of the swamp, completed the entertainment so far as I was concerned. It was too dark to follow the wounded animal; so I groped my way back to camp, and related my adventure with the "cariboo calf."

On the 18th of July the height of land was reached, and over this a portage of a mile and a quarter took us to a large body of water, which we have named Daly Lake, the level of which stood at an elevation of fifty feet below that of the one we had crossed just south of the divide. The height of land, from our barometric readings, was found to be about thirteen hundred feet above the sea; and upon this summit, to the top of a tall spruce tree, before we departed, I took occasion to nail the "flag that has braved a thousand years the battle and the breeze."

Daly Lake was found to be sixty miles in length, and from its north shore, after a good deal of searching in many deep bays, the outlet - our informant's "Great River flowing to the north" - was discovered.

It was indeed a great, broad, and rapid river, broken up into several channels, not deep, but as it were the waters of the lake spilling over the edge in the lowest places.

This was the river we had determined to descend; so with nothing more than conjectures as to where it would bear us, we pushed our canoes into the stream, and sped away to the northward.

Landings were made when necessary, in order to carry on the survey and examination of the country; but otherwise our canoes were kept in the current and our men at the paddles.

Though outlying groves of spruce and tamarack might still be found here and there in the most favored localities, we were now well into the barren lands; and the change from the wooded district was found to be anything but desirable.

An alcohol lamp for the purpose of making a hot cup of tea is an excellent thing; but, to a party wet and cold by rain or spray from the rapids, it is a miserable substitute for a roaring camp-fire.

The weather became very wet and cold, and storms, which swept the open country with frightful fury, began to be of very frequent occurrence; so that now our camp outfit was seldom if ever dry, and the progress of our survey was much interrupted.

On the 29th of July, as we were traversing the shores of Carey Lake, we were permitted to witness a sight which, as long as I live, I shall never forget. The land, as far as we could see, was

here, there, and everywhere covered over large areas by moving masses of reindeer. No estimate could be arrived at as to their numbers. They could only be described in acres or square miles. After killing as many as we considered necessary for making dried meat for the rest of our journey, we walked into the solid herds, armed only with a camera, and secured a number of photographs. These now afford me a great deal of satisfaction; for when I begin to talk "deer," and people smile a look skeptical, all I have to do is to produce a photograph.

On the 7th of August we reached a great lake—probably Samuel Hearm's Doobaunt or Tobaunt Lake—which was then, as it perhaps always is, covered by a field of heavy ice. We were able to proceed in our canoes, without much obstruction, in an open channel of water along the shore, though sometimes we were blocked and had to portage past the ice, which in several places I measured and found to be as much as seven feet in thickness.

The weather experienced in the vicinity of this lake was most inhospitable. Five days were spent in traversing the one hundred miles of shore line from inlet to outlet; but seven days were unwillingly spent upon the rocky ice bound shore, where we were forced to await the abatement of two terrific storms accompanied by rain and snow. The lack of sufficient shelter contributed greatly to our discomfort throughout our entire Barren Land work; for unfortunately our tents, though admirably adapted for woodland districts, were here of comparatively little use, the rains being continually driven through them by the terrible force of the gales.

When the outlet of Tobaunt Lake was discovered, it was not found to be obstructed by ice as it was feared it might be, but as before the clear, cold waters of the great river rushed on to the northward.

A few miles down from the lake we first met with the Eskimos, of whom our men had been told such blood-curdling stories by the Chippeweyans. Had our men been disposed to believe the reports, they must have been pleasantly disappointed by the cordial, demonstrative receptions which from time to time we received at their hands.

(In a paper of this kind, it is necessary to be brief; otherwise I might be able to speak of many incidents, or characteristics of the country which would be of interest; but to give anything like a full account of our journey would trespass entirely too much upon your patience and the pages of our Report.)

About the time we entered the Eskimo country, we also came across the first signs of Musk Oxen; but from this time forward the appearances of game of any description began to be rare, and with the month of August we parted company entirely with the deer.

Towards the end of August, judging from our geographical position and our north-westerly course, the indications were that our destination was to be the Great Fish River instead of Hudson Bay as we had hoped; but after following a very winding course, on the

evening of the 2nd September, we found ourselves on the waters of Baker Lake, which is emptied by two rivers into Chesterfield Inlet, the north-west arm of Hudson Bay.

Baker Lake as well as the Inlet was originally discovered and crudely mapped by one Captain Christopher in 1770, so that we were now again on waters not entirely unknown.

Since the commencement of our canoe journey we had altogether travelled a distance of fourteen hundred miles. We had carried on our survey for one thousand and fifty miles, of which distance eight hundred had been through entirely new country.

The balance of our route lay through Baker Lake and Chesterfield Inlet, and down the coast of Hudson Bay, which represented, to Churchill,—the nearest habitation of man—a distance of seven hundred miles.

For this trip we still had three weeks rations on hand. This it appeared would be scarcely sufficient, but resolved to make the best possible use of our time. On the morning of the third we continued our traverse.

On the evening of the 6th, having been much delayed by head winds, the northerly of the two outlets was discovered. At first no current could be detected in the river, but when we had followed its course a short distance, a strong flow, almost approaching a rapid, was met with, setting against us. Could it be possible that we were ascending a large river thus flowing in from the eastward? The canoe-men were all confident that we were, and wished to turn back; but thinking it possible that we had already reached tide water, they were instructed to proceed, though very much against their inclinations. Soon, to their astonishment, and our mutual satisfaction, we were privileged to witness the seemingly strange occurrence of the river ceasing to flow, and then turning strongly in our favor. We had thus reached the tide water nearly two hundred miles in from the Bay. A week later we obtained our first view of the "big sea water," and on the morning of the 13th of September we turned southward and during the succeeding three days, having fortunately fair weather, we traversed the bleak rocky shore of Hudson Bay for a distance of one hundred miles.

This run along such an exposed coast was most encouraging, for it took us across the mouths of several deep inlets which would have required days to traverse had the weather been unfavourable.

During the night of the 15th, however, as we were encamped on a little island in the mouth of Corbet's Inlet, we were overtaken by one of the many severe storms of the season, and for two days we were imprisoned there upon the sand bar. The gale was, as usual, accompanied by a chilling rain, which penetrated our tents and made our lives generally miserable.

On the afternoon of the 17th the wind fell, and though a heavy sea continued to roll in from the east, the waves ceased to break. Not wishing to lose any time, as the bottom of the "grub sack" was

already very visible, we launched upon the heaving waters, and started across the mouth of the inlet on an eight mile traverse

As we pulled out beyond the shelter of the islet we found the seas running fearfully high, but so long as they did not break upon us we had little to fear.

But when we were well out in the inlet, the wind began to come in gusts from the opposite direction to which it had been blowing, and speedily increased in strength to a full gale. The falling of the wind had been but the lull of a storm centre, and we were evidently in for a struggle. The waves became "choppy;" were again broken by the gale, and their crests swept over us.

Our position was indeed perilous. Every effort was made to guide our canoes in such a way as to brook least danger, but in spite of all we could do the seas dashed in upon us, and it appeared as if we would never reach the shore. My brother and I laid down our paddles and with tin kettles did our utmost to dash out the water and keep ourselves afloat. Many times the great tumbling billows seemed as if they would certainly roll over us, but, like ducks on the water, our little cedar crafts ever rose with the waves, though often half filled with spray.

At length we neared the land, but only to find it skirted by a long continuous line of shoals upon which the full force of the sea was breaking with frightful fury.

What was to be done? It was impossible for us to retreat in the teeth of the gale, and without a harbour we must certainly be smashed upon the rocks. On we were borne by the force of the storm for the breakers, but just as the crisis appeared to have come—thanks to a kind Providence—a way of escape was presented. One rock was found standing out a short distance in advance of the others, thus forming a little cove, and with a pull for our lives we managed to guide our canoes so that one after the other they were dashed into this shelter, where the force of the seas being broken, we all jumped from our canoes into the shallow water, and succeeded in landing them safely. Every particle of our outfit was thoroughly soaked, but we were well pleased to escape with no worse misfortune.

The country here was very barren, comparatively level, and of a most dreary aspect, without a sign of vegetation. The gale continued for two days longer so that we were not able to launch our canoes.

As provisions were now about exhausted, the attention of our party, whilst ashore, was chiefly devoted to hunting; but our efforts were not very fruitful, resulting only in the capture of one little duck and two gulls.

On the morning of the 20th, the wind having fallen, camp was called at four o'clock, and, without breakfast, our journey resumed. Later in the day each man had a small piece of dried meat, quite insufficient to satisfy his appetite; but, hungry though we were, the motto plainly inscribed on every man's face was "Speed the paddle."

Thus we pressed on for two days, and made very good progress, but, having scarcely anything to eat, we began to feel weak.

On the morning of the 22nd we were again storm bound by a heavy gale and snow, which lasted four days. During this time we suffered considerably from the violence of the storm as well as want of food. As soon as it had abated sufficiently, all hands went off hunting, and fortunately several hares and ptarmigans were secured and thoroughly appreciated.

On the morning of the 26th, the wind having fallen considerably, our canoes were loaded—though not with one bite of provisions—and a fair run made. Several sea ducks were shot during the day and thus our supper was secured.

The next day, again wind bound by a gale from the south-west, the whole party started out to hunt for food. We were not altogether unsuccessful, assembling in the evening with five marmots or kind of ground squirrels

The next morning, the 28th, though a strong breeze was blowing, we determined to make a start at least, for to remain where we were meant that we must soon starve to death. We were already much reduced and weakened from the effects of cold and hunger, and the condition of the weather had of late been most disheartening. We were still fully 300 miles from Churchill—the nearest habitation of man. We had not one bite of food. The country was covered with snow, the climate piercingly cold. We had no fire, and worst of all, the weather was such the greater part of the time that we were unable to travel. It was difficult to be cheerful under such circumstances, but we kept up a brave exterior and pushed on. As we were bending to our paddles and had made perhaps seven or eight miles south-westerly along the coast, a band of deer was observed upon the shore, so our course was quickly altered and a landing effected; though with some difficulty, as the tide was falling and the water rapidly receding. The men were left to keep the canoes afloat, and from being damaged by the rocks, whilst my brother and I, with our rifles, went off in pursuit of the deer, which were now very different animals to hunt than when in great bands earlier in the season. Another fact which rendered them difficult to approach, was, that the country was now a vast and dreary plain, affording no cover for the hunter save that of a few scattered boulders. Behind some of these we crept for long distances, but found it impossible to get within any kind of medium range. Several times we got within 400 or 500 yards of the band, but could get no closer, and so opened fire at that distance. At first they trotted about in confusion, but then, locating their source of danger, fled straight across the plains. For several hours we followed them, vainly seeking for some opportunity of nearer approach, but being unsuccessful we retraced our weary steps to the shore, where we arrived faint and exhausted. We found the men had been unable to keep the canoes afloat. They were now high and dry, and the water of the bay barely visible in the distance.

As it was impossible to launch our canoes until the return of the

tide, two of the Iroquois, Peter and Louis, were given our rifles and sent off to try their fortune. As they departed and left us lying in the shelter of a rock, we sincerely wished them success. We had done our utmost and had failed, if they also should fail it was too apparent what must soon be the result. Two of the other men were sent off with shot guns, and then anxious hours of waiting followed. No shots were heard, but towards evening Peter and Louis and afterwards the other men were observed returning in the distance. None of them carried loads, as we had hoped they might, and at the prospect I confess my heart sickened. As they came nearer, however, Louis, holding up something in his hand, exclaimed, "I got um." It was the claw of a polar bear, and we soon learned, with much joy, that he had, sure enough, killed a bear, which he had unexpectedly come upon at the edge of a little lake whilst following the deer.

It was about six miles inland that the encounter took place, and Louis was alone at the time. The meeting was a mutual surprise, sprung at close quarters, when our hunter's footsteps aroused bruin from his bed in the snow. Without wasting time in useless reflections the bear made straight for Louis, who met his charge with a slug and brought his assailant to his knees. The Indian then ran out upon the ice of the lake, but finding himself at a disadvantage there, instead of the bear as he had thought, he turned upon his pursuer, fired, and again knocked him down. Only for a moment, however; he got up and with a roar of desperation made again for Louis who had now regained the shore. They were already within a few feet of each other, so, realizing his situation, the Indian turned and this time shot his enemy dead at his feet. It was a happy shot for our whole party. Being unable to do anything with the carcass himself, he had returned—meeting his brother by the way—for assistance. All gladly followed him to the scene of the combat where some moss was also found by which a fire was made and some of the meat roasted.

The reviving effect produced upon the spirits of our party was marked. Though the flesh of the polar bear is famed for its rankness we would not have exchanged it at that time for its weight in silver. I remember one of our western half-breeds being so exultant that he affirmed "He would not own the Queen as his uncle."

No part of the carcass was wasted, but every scrap, amounting to about 200 lbs. of meat and half as much blubber, was put into sacks and carried to the canoes, where, arriving long after dark, camp was made.

The next morning a strong east wind was blowing, driving a wild surf in upon the shore and making it impossible to launch. We were thankful, however, during our delay, to have a supply of meat, and advantage was also taken of the opportunity afforded for obtaining moss to cook it. Though several miles distant a quantity of this was gathered, and several large kettles of meat boiled, almost sufficient, it was hoped, to take us to Churchill. But alas for our hopes! The gale, which had been blowing, increased in fury until it became

a terrific storm accompanied by sleet and snow, and continued for five days.

One of the nights, during a wild snow storm, the tent which my brother and I occupied was ripped up the back by the force of the gale, and with difficulty secured from being carried away. So piercingly cold was the wind that without shelter we must soon have perished. We were already numb with cold, but midst the snow and darkness I managed to find a sail-needle and some twine, and then having lowered the tent to the ground—whilst my brother held the canvass together—I, with stiffened fingers, stitched up the rent. When the tent was again raised our bedding was buried beneath a snowdrift, but our blankets being our only comfort the snow was shaken off and in a half perished condition we again crept beneath them to await results.

After this great storm, which lasted until the 4th of October, the whole country was buried in snow, and every possibility of finding even a little moss to burn was excluded.

Winter had indeed overtaken us. Ice was forming all along the shore of the Bay, and it was evident that within a few days canoe travelling must be at an end.

On the above date, though light snow was still falling, the wind had gone down sufficiently so that we were able to launch our canoes after a long portage out to meet the tide. By the most vigorous exertion all we were able to make during the day was ten miles, and that through a chilling spray which froze upon us and encased canoes and men in an armour of ice. We had great difficulty in getting ashore to camp at night, having again to portage a long distance over the low-tide boulder flats.

On the morning following the water of the Bay was out of sight and it was not until about noon, when the tide flowed in, that we could get into the water. Then we were so obstructed by the new ice along the shore and a head wind that we were not able to make more than a mile or two before we were again forced to struggle to the shore. At this rate of travel we would be a long time in reaching Churchill. We had now been more than three weeks on the coast and were still at least 250 miles from our haven.

Some different mode of travelling must be adopted or we could never get in. The shore ice was forming rapidly and might now block us at any time. We had not more than meat enough for another day or two, and the game had all left the country. What was to be done? My brother and I talked the matter over during the night. The plan suggested itself to abandon everything but rifles and blankets and to start down the shore on foot. But then how could the numerous large rivers which were still open, be crossed? Again, to this plan there was the objection that having been in canoes all summer and though still strong enough to paddle, our party was in very poor condition to walk. The only other feasible plan was then suggested. It was to abandon dunnage, instruments, rock collection, etc., everything except note books, photographs, plant collection,

rifles, blankets, and two small tents; and thus with these to start out with only two canoes, and an increased force of one man in each of these, to travel for our lives.

This plan was decided upon, and in the morning the men were set to work to make as secure a cache as possible of all our stuff, excepting the articles above-mentioned. This occupied the whole morning, and to us it was an unpleasant task, but as it seemed to be the only way by which we might hope to escape from this dreary ice-bound coast, it was felt to be a necessary one. Having made as snug a cache as we could build, with heavy heart we turned our steps towards the shore.

After launching our two canoes it was with great danger and difficulty that we were able to force our way through the broken but heavy shore ice to the open water beyond. Having got clear of the ice we were able to make good progress, and so, even at great risk of being smashed upon some of the many rocks, we paddled far into the night; but at a late hour, being sheathed in ice from the freezing spray, we reached the shore and without supper lay down to sleep upon the snow.

Eight more dreary days passed, six of which were spent in battling with the elements, and two in lying storm-stayed upon the shore. During this interval our party suffered much from cold and lack of food, and to make matters worse dysentery attacked us.

The shore ice had been steadily forming, rendering it more and more difficult to launch or get ashore. Our frail crafts had been badly battered and several times broken through by the ice, and the low character of the coast had not improved. Still, with hollow cheeks and enfeebled strength we struggled on, sometimes making fair progress and at others very little, until on October the 14th as we advanced the ice became so heavy and extended so far out to sea, that in order to clear it we could not see the land. Towards evening we began to look about for some opportunity of going ashore, but nothing could be seen but the sea and a vast field of ice with occasional protruding boulders. We pushed on hoping to find some bluff point or channel of water by which we might reach the shore, but the appearance of things did not change in the slightest. We stood up in our canoes and climbed upon boulders, vainly hoping to at least get a glimpse of land. Of course we knew the direction in which the shore lay, but it was so low and we were so far out that it was beyond our view. Soon the shades of night began to fall about us, our canoes were leaking badly and the weather was bitterly cold. We tried our utmost to reach the shore, but failing, resolved to await the time of high tide, which was 10 p.m., when it was hoped we might do better. Ten o'clock came, however, and we were still in the same condition, no more able to penetrate the ice or gain the shore than before. Indeed before this it had become intensely dark, and now we were in great danger of being smashed by ice or rocks. We were utterly helpless and so could do nothing but remain where we were or go where the tide chose to carry us until the return of daylight.

The hours of that night were the longest that I have ever experienced, and the odds seemed to be against us surviving until morning; but at last the day returned and we were all alive. My brother was nearly frozen, having been obliged to sit or lie in icy water all night. Poor little Mitchel had both of his feet frozen, and several others of us were badly used up. Still we were in the same position as we had been in the night before. We could not hold out very much longer, we must gain the shore or perish. At the time of high tide, the ice having somewhat loosened, our canoes were thrust into the pack, and by great exertion as well as much care we succeeded about one o'clock in reaching solid ice upon which we were able to land, and, for the last time, haul out our noble little crafts. We had been in them just thirty hours, battling with the ice, exposed to a chilling winter blast, our clothing saturated and frozen, and our bodies faint and numb with starvation and cold. But we were now within reach of the land, and all of us who were able gladly scrambled out upon the ice to stretch our cramped and stiffened limbs. My brother was not able to walk, but was in a perishing condition from the exposure of the night. He had barely been able to keep his canoe afloat by bailing, and had been sitting in water for seventeen hours. I wrapped him up as warmly as I could in one of the canoes and administered half a bottle of Jamaica ginger, the last of our stock. We then set about hauling the canoes over the ice to the shore, which we soon reached and where we were so fortunate as to find drift-wood. A fire was soon made, camp pitched, and, still more, a meal prepared. On the previous day a seal—the only one secured on the trip—had been shot and was now about to be appreciated. Camp being pitched my brother was moved to our tent, whilst the weaker of the men sought shelter in theirs. The three western men were still fairly strong, but the remaining five of us were very weak and badly used up. We knew now, however, that we could be no very great distance from Churchill for we had again reached the wooded country, and two or three miles back from the shore could be seen dark clumps of spruce trees. This was a most consoling fact, for, besides having meat for several days, we now felt that we would have shelter and fire.

As to again launching our canoes, that was entirely out of the question, so that if we would reach Churchill at all it must be by land. As most of us were unable to walk, the only course open appeared to be to send on some of the stronger men to, if possible, reach the Fort and bring back a relief party. This plan was proposed, and two of the western men, Jim and John, volunteered to undertake the walk. We thought the distance could not be more than fifty miles and might be considerably less. On the following morning, the 16th of October, the two men set out on their journey, whilst those of us remaining proceeded to move our tents back from the shore about two miles to the nearest woods, where we might make ourselves more comfortable to await the success or failure of our relief party. A sheltered spot was selected for our camp, in a thick grove of spruce trees, and after

clearing away about two feet of snow which covered the ground, the tents were pitched, then well carpeted with spruce boughs, and a big camp fire made. This was indeed a happy change from lying in our canoes in the ice pack. Clothing and blankets were now dried, and with the seal meat besides some ptarmigans which we shot in the groves, we were soon very comfortable, with the exception, perhaps, of poor Mitchel who suffered much from his frozen feet.

About one o'clock on the afternoon of our third day at this camp, as we were all seated within our tents enjoying our dinner of boiled ptarmigans, my brother and I were startled by hearing some one exclaim "Halloo Jim?" The eagerness with which we scrambled over dinner and dishes to our tent door, can better be imagined than described, and upon looking out, sure enough there was Jim returning.

Was he alone? No, thank the Lord! Behind him, a moment later, emerged from the woods, other strange men, followed by teams of dogs and sleds. One after the other there came scampering along no less than four teams hauling long, empty sleds, capable of furnishing accommodation for our whole outfit. As they drew up at our camp, Jim advanced and handed us letters from the trader and Mr. and Mrs. Lofthouse—the missionary and his wife—whose acquaintance I had the pleasure of making on two former visits to Churchill. The letters were not mere expressions of sympathy, but were accompanied by such provisions as we might require until we should all reach the Fort. It would be difficult to describe our feelings upon this occasion, the termination of our many hardships.

After a hard two days' tramp through the deep snow, Jim and John had reached Fort Churchill, where they had found kind friends ready to send us assistance.

Dog teams had been placed at their disposal, provisions supplied, and early on the morning of the same day on which they had found us, the train had set out for our relief.

With light sleds they had travelled at a rapid pace over the thirty miles of snowy plains which were found to still separate us from our haven. Another day of good travel in our canoes would have taken us in, but this was not afforded us.

With as little delay as possible preparations were begun for our sled journey to the Fort on the following day. Canoes were hauled up from the shore—where we had been obliged to leave them—and loaded upon two of the sleds; camp outfit and provisions were loaded upon the others, and as far as possible everything was made ready for an early start in the morning.

Long before daylight camp was astir, breakfast was partaken of by the light of the camp fire, and at the first streaks of dawn our crippled party, loaded upon the dog sleighs, was wending its way to Churchill.

The snow being very soft at this early season, the travelling was heavy and comparatively slow, but being anxious to make the Fort in the one day, the teams were urged on. At a sheltered spot, rather

more than half way to Churchill, a brief halt was made for dinner and to rest the dogs ; but without allowing the usual time for a smoke, we again pushed on

At three o'clock in the afternoon we reached the bottom of Button's Bay, and thence shaping our course north-easterly, we arrived about two hours later, at the base of a long range of rocky hills. For some time we skirted the foot of these, until, reaching a low place in the ridge, we turned up the steep path, and after a short climb to the crest, we found ourselves within full view of Fort Churchill. Though consisting of only four or five old frame buildings, the sight to us was one of profound satisfaction, and for a moment we paused on the summit of the ridge to take in the realities of the situation.

Little time, however, was afforded for reflection, for at the crack of the driver's whip the teams bounded forward, galloped down the steep slope, and without slackening their pace, sped across the plains below, until they came to a halt in front of the house of the Hudson Bay Company's trader. Presently a tall young Scotchman came out to receive us, introducing himself as Mr. Matheson, the master of the Fort. We felt a little taken back upon at once being asked how long we expected to remain ; however we arranged with him for quarters and rations for our men and board for ourselves until such time as we might be able to continue our journey on foot.

